

Report

FOR THE YEAR 1895,

PRESENTED TO THE

Spilsby Rural District Council

BY

FRANCIS J. WALKER, M.D., L.S.Sc.,

M.R.C.S., Eng.; L.R.C.P., London; L.S.A.,

MEDICAL OFFICER OF HEALTH.

SPILSBY:

W. E. PARSONS, PRINTER, MARKET PLACE.

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GENTLEMEN,

As your Medical Officer of Health, I beg to lay before you my Report for the year ending December 31st, 1895.

I am glad to say the year has not been marked by any serious epidemic, although cases of infectious disease have frequently cropped up. The Birth-rate has slightly increased, and the Death-rate has continued remarkably low, as also has that of the seven principal zymotic diseases, which this year represents but one death in every 2000 of the population.

During the year an alteration has been made in the area over which the Spilsby Rural District Council exercises authority, and this has been brought about by the addition of the newly formed parish of New Leake, a village which was formerly under the jurisdiction of the Boston Rural Sanitary Authority. New Leake has a population of 576, and an area of 3400 acres, giving the proportion of one person to nearly six acres, a proportion which is found to agree very closely with the average of the rest of the district.

In June the inhabitants of the town of Alford applied to the Lindsey County Council for powers to constitute themselves an Urban District, and this application was granted. The alteration will come into force on April 1st, 1896, on which date Alford, with a population of 2835 and an area of 1079 acres, will cease to be under the authority of the Spilsby Rural District Council.

The first part of my Report will treat of the infectious diseases that have occurred during the year, together with the means taken for preventing their spread; the second, of the various sanitary works that have been accomplished; and the third, of vital statistics.

EPIDEMIC DISEASES.

MEASLES.—This disease occurred in some villages during the first half of the year, and caused three deaths. The earlier cases that came under my notice were at Willoughby, where the disease had prevailed during the latter part of 1894. Although here one death was recorded, that of an infant aged 7 months, the outbreak soon came to an end. In January also several cases showed themselves in Welton, where it was thought advisable to close the school for a short time. In March I heard of the disease in Toynton All Saints, and here too, the cases being rather numerous, the school was closed for a month. One death occurred, that also of an infant 13 months old. In the same month the disease cropped up in Scremby, and in May in the adjoining village of

Skendleby, where one child died. The schools in these two villages were closed. Towards the end of June I again heard of Measles, this time at Orby. Here too the school was closed, and the disease soon ceased to show itself. From that time nothing further has been heard of this complaint.

SCARLET FEVER.—Altogether I have received 64 notifications of Scarlet Fever during the year. This number is less than half that of either 1894 or 1893, but is slightly greater than that of each of the three previous years (1892-91-90). The notifications were received during every month of the year except August, but nothing of the nature of a serious epidemic took place, for indeed at no time were there more than three separate families affected during the same outbreak. Two deaths occurred, both in March, one in Alford and the other in the neighbouring parish of Bilsby. As this still continues to be the most prevalent of the infectious diseases, I think it well again to tabulate the cases of Scarlet Fever, showing the various months in which they occurred, the actual number, and, where ascertainable, the probable source.

January. Three cases in one house at Burgh, connected with others which existed at the end of the previous year.

„ One case at Sausthorpe, probably imported.

„ Seven cases in two families at Hundleby, a continuation of an epidemic of the previous year.

„ Six cases in one house at Halton.

February. One case at Thorpe, contracted from one of the Halton cases.

„ Two cases at Wainfleet.

February. Three cases in two houses at Alford.
 ,,, Four cases in one house at Bilsby.

March. One case at Friskney.
 ,,, Seven cases in one house at Wainfleet, the Friskney end of the village.

April. Four cases in two houses at Burgh.
 ,,, Four cases in one house at Brinkhill, probably an extension from Alford.
 ,,, One case at Friskney, connected with the one in the same parish the previous month.
 ,,, Four cases in two houses at Alford, connected with those which occurred in February.
 ,,, An isolated case at Irby.

May. Three cases in one house at Alford.

June. One case at Alford.

July. Two cases in one house at Wainfleet.
 ,,, Six cases in one house at Mavis Enderby.

September. Two cases in one house at Alford.

October. Eleven cases in three families at Sutton, probably imported from Mablethorpe, a village in the Louth Rural District.
 ,,, Four cases in three houses at Alford.

November. An isolated case at Eastville, removed during convalescence from Boston.

December. An isolated case at East Keal, imported from Boston.
 ,,, An isolated case at Well.

It was not found necessary to close any school on account of this disease, the isolation of the particular families being considered a sufficient means of precaution.

WHOOPING COUGH.—This disease has not been very prevalent, and the area over which it extended was limited. In January some cases appeared in the Workhouse, and these were brought about by the introduction of a family of children from Halton, who were at the time suffering from the early stage

of the disease. Shortly afterwards Whooping Cough was heard of in the parishes of Eastville and New Leake, and here too it was contracted from some children from the fen part of Halton, who attended the school which is common to the parishes of Eastville and New Leake. During this epidemic one infant died aged thirteen months.

DIPHTHERIA.—During the year 25 cases were notified as Diphtheria, and of these 13 or more than one half occurred in the town of Alford, the others being located at Burgh, Winthorpe, Wainfleet, and Skendleby. The Alford cases showed themselves principally in the months of April and May, during which time I received 9 out of the 13 notifications. These cases were scattered over different parts of the town, and were of varying ages, some being children at school, and others adult persons. Two of these 13 proved fatal. The disease never seemed to put on very virulent characteristics, for although in several instances there were many children in the family, there were never more than two affected in the same house. Of the remaining cases in other parts of the district, one was at Burgh and one at Winthorpe; but these were so isolated and so mild as to call for no comment. Three were at Wainfleet in an outlying part of the parish. It is singular to relate that the house here was next door to one in which six cases occurred in March, 1894, just thirteen months previous. This seems a long time for the infection to have remained dormant, still I can give no other explanation of the cause of this

particular outbreak. In November and December there were six cases in Skendleby, one proving fatal. There appears to have been a good deal of sickness in this village of an ill-defined character, accompanied with throat symptoms, during the latter part of the year, and although this was not recognised as being of the nature of diphtheria, it is quite probable that it had a close connection with the subsequent outbreak of what proved to be a well defined disease.

MEMBRANOUS CROUP.—A case of this disease, which is so much like diphtheria as indeed to be considered by some authorities as identical with it, was notified from Alford, and after an illness of a very short duration proved fatal on March 28th, just about the time of the appearance of diphtheria in this town.

ENTERIC FEVER.—Of this disease six cases have been notified. The first was an isolated one at Croft in January, which proved fatal on March 14th, just two months after the illness commenced. It was difficult to assign the exact cause to this case, and nothing further occurred. In February a case was notified from Alford. It was that of a delicate child aged 7 years, and unfortunately proved fatal on April 21st, that is nearly ten weeks after contracting the illness. The sanitary arrangements, although primitive, did not seem to be the cause of the disease, and the water was good and drunk by other families living in the same street. I look upon the child's great constitutional weakness as furnishing the chief explanation of the fatal result.

The next notification was that of a case in a house near Firsby Station. There are in this immediate neighbourhood three houses, two new and one old, and in each of these Enteric Fever has occasionally shown itself with varying intervals ever since 1885. Every possible sanitary improvement has been ordered and carried out. In 1885 the old uncemented privy vaults were emptied, disinfected, and filled in, and movable receptacles substituted, the well from which the drinking water was obtained was thoroughly cleaned out and all known source of pollution removed. In spite of these precautions the disease cropped up in 1886. The well was now no longer allowed to be used for drinking purposes, and water had to be fetched from Firsby Station. Nothing more was heard until two years afterwards, when another case occurring, the pump was taken away altogether and the well closed, although the inhabitants said the water had never been used for drinking purposes. This water appeared to be the cause of the several outbreaks, as from 1888, when the well was closed, to 1895 no cases occurred, and we really thought we had got to the end of the disease, but in June this year a notification of a case of Enteric Fever in one of the two new houses was received, and although I have many times inspected the premises, I am obliged to confess the origin of this last case still remains a mystery. The next three cases occurred in one house in Alford, and, strange to say, this same house had Enteric Fever in it in 1891. It is now unoccupied.

ERYSIPELAS.—I have received 12 notifications of this disease, a number slightly less than that of the last three years. The cases were isolated, most of them mild in nature, and all ended in recovery.

DIARRHŒA.—As generally happens this disease was more or less prevalent in many parts of the district during the hotter months of the year, but only in one instance did it prove fatal, the victim being an infant under one year.

INFLUENZA.—This disease did not quite leave us, although its appearance was much less frequent than in former years, and it did not show so markedly its characteristic of rapid infectiveness. Only two deaths were recorded under this heading, one in April and the other in May.

The Infectious Diseases (Notification) Act has now been in operation six years, and time has been given us for forming an estimation of its merits and utility. I have no hesitation in saying that it has become a most powerful aid in the prevention of the spread of infectious diseases. Before we were armed with this weapon, the enemy was too frequently allowed to concentrate its strength and gain a foothold before its presence became known, whereas now, we are enabled to attack it single handed in its first lurking place. This of course entails a considerable increase of work upon your officials, but this increase in the work is compensated for by increased satisfaction in the working.

During the year I received altogether 109 notifications of Infectious Diseases, which is 63 less than last year. Their distribution under the several headings will be seen in the following table:—

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric or Ty- phoid Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Total.
1890	38	3				3	1				10	55
1891	31	2	1			25	2				7	68
1892	48	10				5	1				16	80
1893	188	15				11	2				16	232
1894	134	21				3					14	172
1895	64	25	1			6	1				12	109

SANITARY WORK.

SPILSBY.—An outlying cluster of houses situated in what is known as Masonic Lane remains in the same state with regard to drainage as when reported upon last year, and the same may be said with

regard to the drainage of Alma Place and the immediate neighbourhood.

ALFORD.—The inhabitants of this town having during the year applied to the Lindsey County Council for power to constitute themselves an Urban District Council, it was thought better to postpone the contemplated scheme of drainage, and leave Alford to carry out that work to its own satisfaction. The urgency for a better system of drainage still remains, and I hope this matter will be taken seriously in hand by the members of the Alford Urban District Council so soon as they come into office, and thus bring to an end the long existing nuisance in the parish of Bilsby, which still will remain a part of the district under your supervision.

WAINFLEET.—The sewage works at Wainfleet have been completed and are found to act very satisfactorily. They were formally opened by your late Chairman on May 1st, and he, accompanied by other members of the Council, made a general inspection of the entire system. The plans were skilfully prepared and the specifications drawn up by your Surveyor, and under his supervision the work was efficiently carried out by the contractor. I hope we have heard the last of any complaints with regard to the nuisance arising from polluted ditches in the parish of Wainfleet All Saints.

BURGH.—The old windmill in connection with the sewage pumping works having become useless has

been removed, and an engine house, steam engine, and centrifugal pump have been put in its place. The disposal ground also has been relaid and retrenched, and, although small, I hope will be found sufficient at present for the efficient purification of the sewage.

SUTTON.—An extension of the drainage of Sutton has been effected, and a new filtering tank has been constructed near the outfall on the Trusthorpe road.

So far nothing further has been done with regard to the Churchyards of Friskney and Partney. The unsatisfactory condition of these burial grounds was reported to you by me last year, and my report was duly forwarded to the Local Government Board; they in their turn subsequently passed it on to the Home Office, since when nothing has been heard of it. In March I brought to your notice the condition of Stickney Churchyard, which appears to be very full and to have no available space for future interments. A piece of land adjoining, measuring about one rood and three perches, could I believe be procured and added to the Churchyard, and this would serve for some years. This recommendation has I believe got as far as the Home Office, where it also stays.

The old Churchyard in Northolme is full, and there is no space left for further interments. It ought either to be closed or enlarged:

The following is the Surveyor and Inspector's report for the year 1895.

Number of nuisances reported	...	...	...	178	
Number abated without formal notice	...	...	...	103	
Number of formal notices served	...	...	...	75	
Number unabated at the close of the year	...	...	...	3	
Total number abated	...	...	...	175	
Number of legal proceedings taken	...	...	...	1	
Houses reported unfit for human habitation	...	...	...	7	
Houses placed in habitable repair	...	...	...	4	
Houses rebuilt	...	...	...	3	
New drainage to houses	...	...	...	14	
Cases of overcrowding reported	...	...	...	9	
Cases of overcrowding abated	...	...	...	9	
Houses cleansed and disinfected	...	...	...	41	
Defective drainage to houses remedied	...	...	...	17	
Old privies removed and new ones erected	...	...	...	6	
Old privies repaired and ventilated	...	...	...	8	
New earth closets erected	...	...	...	9	
New water closets erected	...	...	...	5	
New dust bins erected	...	...	...	8	
Old dust bins covered in	...	...	...	3	
New water supply to houses	...	...	...	9	
Wells sunk for new water supply	...	...	...	3	
Wells cleansed and water supply improved	...	...	...	5	
Samples of water collected for analysis	...	...	...	16	
Slaughter-houses inspected	...	...	...	17	
Dairies, cowsheds, and milkshops inspected	...	...	...	46	
Schools closed by order	...	...	...	4	
Schools ventilated and drained	...	...	...	5	
Schools cleansed and disinfected	...	...	...	1	
Buildings erected under the Byelaws—Spilsby	4,							
Alford	5,	Wainfleet	5,	Winthorpe	3,	Chapel		
6,	Sutton	10,	Hogsthorpe	1,	Burgh	1	...	35
Buildings erected in other parts of the district	...	14						

The nine cases of overcrowding reported were all

abated; in two by enlargement of the house, and in the others by the reduction of the number of inmates.

I have analysed sixteen samples of drinking water collected for analysis, and the results were that in eleven cases the water was classed as good, in two suspicious, and in three bad.

In December legal proceedings were taken against a builder for erecting a building without giving notice as required by the Bye-laws. He was fined £1. 3s. 6d.

No complaint has been made to me of any offensive trade being carried on, and no food unfit for the use of man has been brought under my notice.

VITAL STATISTICS.

In 1895 the Births were 560, and the Deaths 337. The Birth-rate was 22.96 per 1000, and is a slight rise upon that of last year, but is still 2.29 below the mean-rate of the last ten years 1885-1894. The Death-rate was 13.82, and so maintained the exceptionally low character of that of last year, and is 1.85 below the mean-rate of the last ten years. The average relation of Births to Deaths is 1.6 to 1; for 1895, 1.6 to 1.

The Birth-rate in England and Wales in 1895 was 30.3 per 1000 of the population, which, although higher than the low rates in 1890 and 1894, is lower than any other rate on record, and .9 per 1000 below the average rate of the last ten years.

The Death-rate was 18.7 per 1000, which shows an increase of 2.1 per 1000 on the low rate in the previous year, but is .2 below the average of the last ten years.

The Births were distributed according to quarters as follow :—

	LEGITIMATE.		ILLEGITIMATE.	
	MALES.	FEMALES.	MALES.	FEMALES.
Quarter ending March 31st	58	...	73	...
Quarter ending June 30th	77	...	59	...
Quarter ending Sept. 30th	51	...	60	...
Quarter ending Dec. 31st	59	...	61	...
	—	—	—	—
	245	283	21	11
	—	—	—	—
Total Legitimate	...	528	Total Males	...
„ Illegitimate	...	32	„ Females	...
	—	—	—	—
Grand Total	560		Grand Total	560
	—	—		—

The number of births although still very low, being 85 below the average of the last ten years, showed an increase of 15 over that of the previous year.

For purposes of comparison with former reports, I shall follow the same plan as heretofore adopted, and arrange the deaths in two tables. The first gives the percentage according to age, the second the actual number according to class of disease; and to each is added the average for the ten years 1885-1894.

Under	1895.	Average per centage for 0 years, 1885-1894.
1 year	62 or 18·40 per cent.	14·94 per cent.
2 „	15 „ 4·45 „	3·83 „
5 „	5 „ 1·48 „	3·09 „
10 „	7 „ 2·08 „	2·74 „
15 „	8 „ 2·37 „	1·65 „
20 „	11 „ 3·26 „	2·12 „
30 „	16 „ 4·75 „	5·32 „
40 „	21 „ 6·23 „	3·73 „
50 „	15 „ 4·45 „	5·53 „
60 „	28 „ 8·30 „	7·61 „
70 „	44 „ 13·06 „	13·18 „
80 „	52 „ 15·43 „	20·03 „
90 „	46 „ 13·65 „	12·09 „
100 „	7 „ 2·08 „	1·79 „

The percentage of deaths under one year has increased, being that of 3·45 above the average of the last ten years. Out of the 560 Births, 62 or 11·0 per cent. died during the first year of life.

Class	1895.	Average for 10 years, 1885-1894.
I. Zymotic Diseases 15 21		
II. Cancerous Diseases 23 26		
III. Tubercular Diseases 46 43		
IV. Diseases of Brain, &c. 36 61		
V. „ Heart, &c. 52 40		
VI. „ Lungs, &c. 35 58		
VII. „ Stomach, Liver, &c. 15 21		
VIII. „ Kidneys, &c. 13 12		
IX. „ Women and Childbirth 1 3		
X. „ Skin &c. 0 0		
XI. Debility, Atrophy, and Marasmus 14 15		
XII. Developmental Diseases 17 14		
XIII. Old Age 52 62		
XIV. Violent Deaths 10 12		
XV. Causes not specified 8 4		

The fifteen deaths in the class of Zymotic Diseases were made up of Scarlet Fever 2, Diphtheria 3, Membranous Croup 1, Enteric Fever 2, Measles 3, Whooping Cough 1, Diarrhœa 1, and Influenza 2, and these have already been alluded to. The death-rate per 1000 of the seven principal Zymotic Diseases amounted last year to .49.

The Death-rate for England and Wales for the same Zymotic Diseases was 2.14 per 1000 living, against 2.52 and 1.81 respectively in the preceding two years.

TABLE of DEATHS from the Seven Principal Zymotic Diseases during the last ten years.

	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Small Pox	—	—	—	—	—	—	—	—	—
Measles	—	8	—	—	1	—	—	3	3
Scarlet Fever	2	1	3	1	—	2	1	5	2
Diphtheria	8	1	3	1	—	1	3	3	3
Whooping Cough	—	1	2	5	13	—	1	8	2
Fever, Typhus	—	—	—	—	—	—	—	—	—
," Typhoid or Enteric	...	4	2	3	—	—	6	1	3	1
," Other or doubtful	...	—	1	—	—	—	—	—	1	—
Diarrhoea and Dysentery	4	—	3	2	—	—	—	1	3
Total Deaths from the 7 principal Zymotic Diseases	18	14	9	15	9	7	19	14	12
Deaths from other causes	...	365	369	416	392	420	442	342	369	310
Total Deaths	383	383	430	401	435	451	349	388	324
Death-rate per 1000 Zymotic Diseases	70	55	55	36	60	36	29	79	58	49
Death-rate per 1000 from all causes	15.04	15.17	17.17	16.15	17.67	18.47	14.39	16.10	13.53	13.82
Death-rate for England and Wales	19.3	18.8	17.8	17.9	19.2	20.2	19.0	19.2	16.6	18.7

As this is the Tenth Annual Report, which I have had the pleasure of laying before your Authority, I have thought it might be interesting to give a short account of some of the principal events which have occurred during the years I have acted as your Medical Officer of Health.

Spilsby has had a new drain laid in the Main Street from the "George" Hotel to the "Alma" Ironworks in the Halton Road, a scavenger has been appointed, and many nuisances have been abated.

Alford has had its drainage improved in many streets, various remedies have been tried to minimise the nuisance in the Wold Grift Drain, and a scavenger has been supplied.

Wainfleet All Saints has had a complete system of drainage, with pumping station and disposal ground on the most approved modern principles, provided for the town. It also has had a filtering bed placed in connection with the Haven, which supplies a portion of the town near thereto with a good supply of drinking water. This place too is now supplied with a scavenger.

Burgh has had its disposal ground for sewage relaid, and an engine substituted for the windmill to pump the sewage.

Sutton-on-Sea has had several new drains laid, and a filtering tank placed at the outlet of the Main Sewer.

Hogsthorpe has had new drains laid, and a scavenger appointed.

An Isolation hospital for infectious diseases has been built.

The pollution of many of our streams, caused by sheep washing, has been prevented.

The number of nuisances that have been abated amount to no less than 1996, and in only 10 instances has it been found necessary to call in legal proceedings to our aid.

I have analysed 229 samples of drinking water.

The population has diminished from 25,816 to 23,806 (not including New Leake).

The average death-rate per 1000 has been 15.75, that of the previous decade having been 16.54; the comparison of the Zymotic death-rate for the same period having been .52 to .98.

The order of the Local Government Board having rendered it compulsory that all Dairies, Cowsheds, and Milk-shops should be registered, this order has been complied with in our district, and forty-five of these places have been registered and annually inspected. The Infectious Disease (Notification) Act has only been in force six years, and during that time, I have received no less than 825 notifications, and in every instance the case notified has been promptly visited.

In other ways the Legislature has not been idle; many Acts of Parliament have come into force, all tending to increase the power of your Authority, the labour of your Officials, and the efficacy of Sanitary Work.

I have the honour to be, Gentlemen,
Your obedient Servant,

FRANCIS J. WALKER,
Medical Officer of Health.

SPILSBY,

January, 1896.

APPENDIX.

(A) TABLE of DEATHS during the year 1895, in the SPILSBY
Rural Sanitary District; classified according to Diseases,
Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; public institutions being shown as separate localities. (Columns for Population and Births are in Table B.)	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.						
	At all ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25.	25 and under 65	65 and upwards
Registration Sub-District.							
SPILSBY	96	18	6	4	7	31	30
<i>The Workhouse</i>	16	...	...	...	1	5	10
ALFORD	92	14	3	6	8	22	39
WAINFLEET	59	15	7	2	4	18	13
BURGH	38	8	1	2	1	10	16
STICKNEY	36	7	3	1	2	8	15
Totals	337	62	20	15	23	94	123

TABLE OF DEATHS, ETC.—*continued.*

MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.

MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.									
		FEVERS.		Cholera.		Erysipelas.		Measles.	
		Typhus.	Enteric or Typhoid.	Pneumoperitoneum.	Belapsing.	Pneumoperitoneum.	Erysipelas.	Whooping Cough.	Diarrhea and Dysentery.
Under 5	...	...	...	...	...	...	...	2	...
5 upwds	...	...	1	...	...	...	...	...	...
Under 5	...	...	...	...	...	...	...	1	...
5 upwds	...	...	...	...	...	...	...	...	...
Under 5	...	1	...	...	...	...	...	...	...
5 upwds	...	1	2	1	...	...	...	1	...
Under 5	...	...	...	...	...	...	...	1	...
5 upwds	...	...	...	...	...	...	...	1	...
Under 5	...	...	...	...	...	...	...	1	...
5 upwds	...	...	...	...	...	...	...	1	...
Under 5	...	...	...	...	...	...	...	1	...
5 upwds	...	...	...	...	...	...	...	1	...
Under 5	...	...	...	...	...	...	...	1	...
5 upwds	...	...	...	...	...	...	...	1	...
T.L. {	...	1	...	...	...	...	...	2	...
	1	3	1	...	...	...	...	2	...
	1	1	1	...	...	...	...	1	...
	42	16	30	2	...	...	...	1	40
	42	16	30	2	9	167	275	7	62

B) TABLE of POPULATION, BIRTHS, and of NEW CASES of INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1895, in the SPILSBY Rural Sanitary District; classified according to Diseases, Ages and Localities.

APPENDIX.

RAINFALL FOR 1895.

Month.	No. of days on which 1 or more fell.	Amount in inches.	Average for last 20 years.
January	27	4.07	1.92
February	12	.56	2.02
March	20	2.78	1.64
April	11	1.29	1.74
May	8	1.34	2.05
June	13	1.33	2.21
July	18	4.33	3.08
August	17	3.61	2.69
September	6	.60	2.82
October	16	2.68	3.43
November	23	3.30	3.05
December	15	2.25	2.39
 Total	 186	 28.14	 —

